## Sonoran Desert Toad

## **Bufo alvarius Family Bufonidae**



**Global Rank: G5** 

State Rank: S1 (CA); S2 (NM); S5 (AZ)

**Distribution:** Also known as the Colorado River toad. Extends from the Bill Williams River and the lower Colorado River drainages across southern Arizona to extreme southwestern New Mexico, south to northwestern Sinaloa in Mexico, to extreme southeastern California. It reaches from sea level to 5,300 ft. (1,610 m.) in elevation.

Description: This is the largest of the western toads, and adults reach around 7 1/2 in. (19 cm.) in snout-vent length. Coloration is dark brown, olive, or gray above, with smooth skin. It has long, kidney-shaped parotoids and prominent cranial crests. There are several large warts on the hind legs which stand out conspicuously against the smooth skin. An enlarged whitish wart is near the angle of the jaw. Coloration below is cream. Young have light-colored warts set in dark spots. Both males and females have pale throats. The voice is weak, low-pitched, and resembles a ferry-boat whistle. The vocal sac is missing or vestigial.



Current range of the Sonoran Desert toad

Reproduction: Breeding activity usually starts the night after a heavy spring or summer rain, although breeding is not dependent upon rains. Some males search for females while others call from shoreline sites or in very shallow water. Calling males are usually larger than searching males. Aggregations of about 200 toads have been observed in July. Eggs are laid in long, jelly-coated strings, and may number several thousand eggs per string. While the larval stage may be short, no longer than a month, the breeding season may be quite long.

Food: Diet normally includes beetles, ants, termites, and solpugids. It has been known to also eat snails, grasshoppers, spiders, centipedes, millipedes, wasps, lizards, mice, and amphibians. It apparently will prey on anything it can overcome, regardless of protection by sting-mechanisms or defensive secretions.

Habits: Ranges from arid mesquite-creosote bush lowlands and arid grasslands into the oak-sycamore-walnut communities in mountain canyons. It enters tropical thorn forests in Mexico. Often found near permanent water of springs, reservoirs, canals, and streams, but also frequents temporary pools and has been reported several miles from water. It is nocturnal and widespread through the desert. It is rarely seen except during the breeding season when it may be found on roadways or around permanent or temporary water sources. Much of its time is spent below ground in rodent burrows or near water where the humidity is high.

Management Implications: Listed as endangered by the New Mexico Department of Game and Fish. Skin toxins may paralyze or kill dogs and are a potent hallucinogen. The toad is one of the least known of the North American toads.

Important References: Stebbins, R.C. 1985. A field guide to western reptiles and amphibians. The Peterson Field Guide Series. Houghton Mifflin Company, New York, NY; Degenhardt, W.G., C.W. Painter, and A.H. Price. 1996. Amphibians and reptiles of New Mexico. University of New Mexico Press, Albuquerque, NM.